PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶:

A61K 49/00, 41/00

A1

(11) International Publication Number: WO 99/53965

(43) International Publication Date: 28 October 1999 (28.10.99)

(21) International Application Number: PCT/GB99/01234

(22) International Filing Date: 22 April 1999 (22.04.99)

(30) Priority Data:

9808581,4 22 April 1998 (22.04.98) GB

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application

US 60/084,882 (CIP) Piled on 8 May 1998 (08.05.98)

(71) Applicant (for GB only): MARSDEN, John, Christopher [GB/GB]; Frank B. Dehn & Co., 179 Queen Victoria Street, London EC4V 4EL (GB).

(71) Applicant (for all designated States except US): NYCOMED IMAGING AS [NO/NO]; Nycoveien 2, P.O. Box 4220 Torshov, N-0401 Oslo (NO).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BALINOV, Balin [BG/NO]; Nycomed Imaging AS, Nycoveien 2, P.O. Box 4220 Torshov, N-0401 Oslo (NO). SKURTVEIT, Roald [NO/NO]; Nycomed Imaging AS, Nycoveien 2, P.O.

Box 4220 Torshov, N-0401 Oslo (NO). WIGGEN, Unni, Nordby [NO/NO]; Nycomed Imaging AS, Nycoveien 2, P.O. Box 4220 Torshov, N-0401 Oslo (NO). ØSTENSEN, Jonny [NO/NO]; Nycomed Imaging AS, Nycoveien 2, P.O. Box 4220 Torshov, N-0401 Oslo (NO).

(74) Agents: MARSDEN, John, Christopher et al.; Frank B. Dehn & Co., 179 Queen Victoria Street, London EC4V 4EL (GB).

(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: IMPROVEMENTS IN OR RELATING TO CONTRAST AGENTS

(57) Abstract

Ultrasound contrast agents of the phase shift colloid type, comprising emulsions of volatile oils in water, are provided with gas-containing nucleation sites associated with (e.g. within) droplets of the dispersed oil phase, in order to enhance efficacy and control of the liquid-to-gas phase transition.